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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,995	08/04/2000	Sang-Uuk Song	5000-1-122	2594
33942	7590	11/03/2004	EXAMINER	
CHA & REITER, LLC 210 ROUTE 4 EAST STE 103 PARAMUS, NJ 07652			NGUYEN, TU X	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/632,995

Applicant(s)

SONG, SANG-UUK

Examiner

Tu X Nguyen

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 August 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-17 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Response to Arguments*

1. Regarding claims 1 and 3, applicant's arguments filed 8/3/04 have been fully considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Bridges et al. (US Patent 6,148,197).

Regarding claim 1, Bridges et al. discloses 1 home-zone location registering method for a portable radio telephone to provide a first charging rate for a telephone call made inside a predetermined home zone and a second charging rate for a telephone call made outside the home zone (see col.3 lines 30-34), the method comprising the steps of:

receiving, by the portable radio telephone, a home-zone list downloaded from a home location register (see col.7 lines 30-61),

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determining, by the portable radio telephone, whether the portable radio telephone deviates from the home zone to make a determination of either deviation or non-deviation from the home zone (see col.12 lines 19-21); and

responsive to the determination of deviations informing, by the portable radio telephone, to a mobile switching center of said determination of deviation (see col.10 lines 36-50).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bridges et al. (US Patent 6,148,197) in view of Chow et al. (US Patent 6,456,839).

Regarding claim 2, Bridges fails to disclose the first charging rate corresponds to a wired telephone call rate and the second charging rate corresponds to a radio telephone call rate.

Chow discloses the first charging rate corresponds to a wired telephone call rate (see col.5 lines 15-20) and the second charging rate corresponds to a radiotelephone call rate (see col.6 lines 34-38).

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6. Claims 3-6, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bridges et al. (US Patent 6,148,197), in view of Chow et al. (US Patent 6,456,839) and further in view of Sanmugam (US Patent 5,734,977).

Regarding claim 3, Bridges et al. disclose a home-zone location registering method for a mobile switching center (MSC) (see col.10 lines 36-40) to provide a first charging rate for a telephone call made inside a predetermined home zone and a second charging rate for a telephone call made outside the home zone (see col.3 lines 30-33), the method comprising the steps of:

checking (see col.17 line 57 through col.18 line 11) whether a location registration request is received from a portable radio telephone (see col.7 lines 50-51 and col. 12 lines 20-34)

if the location registration request is received, checking whether the portable radio telephone deviates from the home zone by checking whether the current position of the portable radio telephone is included in a home-zone list (see col.17 lines 57 through col.18 line11);

Bridges fails to disclose upon receiving a call origination from the portable radio telephone, releasing the call origination if the portable radio telephone is deviated from the home zone; disregarding a call termination if the portable radio telephone deviated from the home zone receives the call termination; and preventing a paging by the MSC to notify the portable radio telephone that the portable telephone deviated from the home zone.

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Chow et al. disclose upon receiving a call origination from the portable radio telephone, releasing the call origination if the portable radio telephone is deviated from the home zone (see col.7 lines 9-11). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Bridges with the above teaching of Chow et al. in order to provide no air time charge and release the connection when the mobile roaming from home zone to visitor zone.

Sanmugam discloses preventing a paging to notify the portable radio telephone that the portable telephone deviated from the home zone (see col.18 lines 55-56); and disregarding a call termination if the portable radio telephone deviated from the home zone receives the call termination (see col.18 lines 55-56, when there is no need to page the mobile station outside of the service area, inherently, there is no call termination whenever there is a call from other calling party). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Bridges and Chow et al. with the above teaching of Sanmugam in order to eliminating unnecessary paging results in more efficient use of the limited control channel capacity.

Regarding claim 4, the modified Bridges disclose informing the portable radio telephone when the call origination or the call termination is released (see Chow, col.8 lines 1-19 and lines 60-65).

As to claim 5, the modified Bridges et al. disclose downloading the home-zone list in a memory means of the portable radio telephone (see Bridges, col.7 lines 30-62);

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As to claim 6, the modified Bridges et al. disclose a "first charging rate" and "second charging rate" (see Chow, col.6 lines 34-38).

***Allowable Subject Matter***

7. Claims 7-17 allowed.

8. The following is an examiner's statement of reasons for allowance:

Regarding independent claim 7, the prior art fails to teaching "a location registration message generating section coupled to the comparing section for generating a location registration message to attempt a location registration to the mobile switching center when the BTS information is not included in the home-zone list" as cited in the claim.

Regarding independent claim 12, the prior art fails to teaching "a comparing section for checking whether the portable radio telephone deviated from the home zone by comparing the home-zone list to a sector of a currently tuned base transceiver station from the signal received by the receiving section" as cited in the claim.

Regarding independent claim 15, the prior art fails to teaching "a location registration message generating section for confirming that the portable radio telephone deviates from the home zone if the pseudo noise code identical to the detected pseudo nose code does not exist in the home-zone list" as cited in the claim.

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### **Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed Tu Nguyen whose telephone number is 703-305-3427. The examiner can normally be reached on Monday through Friday from 8:30AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MAUNG NAY A, can be reached at (703) 308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

### **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

TN  
November 19, 2004

  
NAY MAUNG  
SUPERVISORY PATENT EXAMINER